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A NOTE ON THE **PERFORMANCE** OF GINGER (*ZINGIBER OFFICINALE* ROSCOE) UNDER GRADED DOSES OF **NITROGEN**

Although ginger is considered as one of the important spice crops of India, information on the nutritional requirements of this crop especially in the plains is very meagre. In Kerala, the majority of studies in ginger crop are confined to high altitude areas.

While significant increase in yield with 60 kg. nitrogen, 40 kg phosphorus and 60 kg potash per hectare was reported by Lokanath and Dash (1964) lack of response to fertilizer nitrogen was also observed by Muralidharan and Kamalam (1973). In view of the contradictory results reported by research workers it was thought worth while to study the effect of graded doses of nitrogen on the yield of green ginger in the plains. The experiment was conducted in the red loam soil of the College of Agriculture, Vellayani analysing 0.073% of nitrogen, 0.0048% available P_2O_5 and 0.0044% available K_2O with a pH of 5.6 during 1975-76 (April 75 to January 76). The design adopted was R.B.D with four replications. The treatments consisted of 6 levels of nitrogen (0, 25, 50, 75, 100 and 125 kg N/ha.) Nitrogen was applied according to the treatments in two split doses, half the dose 60 days after planting and the rest 120 days after planting. Phosphorus and Potash were applied uniformly to all the plots at the rate of 50 kg each/ha. While the entire dose of phosphorus was applied as basal dressing potash was applied in two equal split doses, half as basal and the rest 120 days after planting. The data on the yield of green ginger are presented in Table 1.

Table 1 The data on the yield of green ginger

Treatment	Yield of green ginger in kg/ha.
T ₁ No nitrogen	2995.37
T ₂ 25 kg N/ha	5373.84
T ₃ 50 kg N/ha	8597.22
T ₄ 75 kg N/ha	7025.46
T ₅ 100 kg N/ha	3813.66
T ₆ 125 kg N/ha	4019.67
'F' Test	Significant
C D. P = (0.05)	3373.84

It is seen from the data that the effect of nitrogen was significant and the highest yield was obtained from the treatment of 50 kg N/ha. The study also revealed that when the levels were increased beyond 50 kg N/ha, there was reduction in the yield of ginger. Muralidharan and Ramankutty (1975) reported increase in the yield of green ginger at 60 kg N/ha. The indication from the present study is that the application of nitrogen in the form of fertilizer can be limited to 50 kg/ha to ginger in the plains.

സംഗ്രഹം

ഇഞ്ചിക്രമീക ഉപയോഗിക്കേണ്ട വളത്തിന്റെ തോതു നിർണ്ണയിക്കാനായി വെള്ളായണി കാർഷിക കോളേജിൽ നടത്തിയ ഒരു പരീക്ഷണത്തിൽ നിന്നും ഹെക്ടർ ഒന്നിനു 50 കി. ഗ്രാം തോതിൽ നൈട്രജൻ ചേർക്കുന്നതു ഏറ്റവും കൂടുതൽ വിളവു തരുന്നതായും അതിൽ കൂടിയ തോതിൽ നൈട്രജൻ ചേർന്നാൽ വിളവു കുറയുന്നതായും കണ്ടു.

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